

# Work Order ID 117758

Thursday, May 01, 2014 10:43:50 AM

**\*117758\***

Page 1

Item ID: D412-694-011

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Spacedoor™ Installation Clear Windows

Start Date: 5/1/2014 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 10/31/2014 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: *[Signature]* Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***  
Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
N/A	Rev N/A

100	Document Control	0.00							
<b>*100*</b>	DOCUMENT CONTROL								
DC	Memo <i>[Signature]</i>	0.00							
Doc.Control -USB or Paperwork Photocopy bluefile and create labels per PPP D412-694-011 CHG005									

*(IX)* **DAS 46** **DEC 24 2014**

140	Pick Kit	0.00							
<b>*140*</b>									
Packaging	Memo	0.00							
Packaging									

*IX* **DAS 28** **DEC 24 2014**  
9-89

150	QC4- 100% Inspect kits for completeness	0.00							
<b>*150*</b>									
QC	Memo	0.00							
Quality Control									

*(IX)* **DAS 46** **DEC 24 2014**  
9-89

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
--	--	---	--

**Work Order ID 117758**

Thursday, May 01, 2014 10:43:50 AM

**\*117758\***

Page 2

**Item ID:** D412-694-011**Accept****\*N900040100\*****Setup Start \*NS1\*****Revision ID:****Stop \*NS2\*****Item Name:** Spacedoor™ Installation Clear Windows**Start Date:** 5/1/2014 **Start Qty:** 1.00 **\*1\*****Cust Item ID:****Required Date:** 10/31/2014 **Req'd Qty:** 1.00 **\*1\*****Customer:****Reference:****Approvals:** **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_**Run Start \*NR1\*****QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_**Stop \*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
<b>*160*</b>	Packaging								
Packaging	<b>Memo</b>	0.00		<b>DAS</b>					
Packaging	Identify and pack for shipping as per PPP D412-694-011			<b>06</b>					
	Location: _____			<b>8-89</b>					
	PPP Rev: _____								
170	QC21- Final Inspection - Work Order Release	0.00							
<b>*170*</b>									
QC	<b>Memo</b>	0.00							
Quality Control									

DAS  
48  
6-89

DEC 2 4 2014

MCS

14-12-24

14-12-24

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence
		<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

# Picklist Print

Thursday, May 01, 2014 10:43:50 AM

Page 1

Work Order ID: 117758

**\*117758\***

Parent Item: D412-694-011

**\*D412-694-011\***

Parent Item Name: Spacedoor™ Installation Clear Windows

Start Date: 5/1/2014

Required Date: 10/31/2014

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A05.04.27New IssueKJ/RF  
IPP Rev:B 07-01-26 Added DSI 9363-011 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

BSP45		Purchased	No			140	Each	477.0000	48	48			
<b>*BSP45*</b> Commercial Rivet	DAS 43 9-89								**			DAS 28 9-89	DEC 21 2014
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					

D2126		Manufactured	No			140	f	404.6800	12.1666	13			
<b>*D2126*</b> Seal	DAS 43 9-89								**			DAS 28 9-89	JAS 26 9-89
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					

				ST282		477				130851			
				120417		477							
				ST405		0.68							
				102729		0.68							
				ST406		404							
				110653		404				13			

(D2126-0730) cut qty (2) at 73.00" as per dwg \*\*\*per kit\*\*\*

D3090-1		Manufactured	No			140	Each	23.0000	4	4			
<b>*D3090-1*</b> Shim 0.250	DAS 46 9-89								**			DAS 28 9-89	DAS 26 9-89
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					

				ST025		23							
				18037		23				4			

D3116-9-DS20 x 2 per DSI attached

B 39182 2x

DAS  
9  
9-89

DAS  
28  
9-89

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design <input type="checkbox"/>									
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Handling/Pre <input type="checkbox"/>									
Material <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Offset/Setup <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Transport <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence  <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
--	--	---

# Picklist Print

Thursday, May 01, 2014 10:43:50 AM

Page 2

Work Order ID: 117758

**\*117758\***

Parent Item: D412-694-011

**\*D412-694-011\***

Parent Item Name: Spacedoor™ Installation Clear Windows

Start Date: 5/1/2014

Required Date: 10/31/2014

Start Qty: 1.00

Required Qty: 1.00

D3090-3

DAS  
46  
9-89

Manufactured No

140

Each

24.0000

4 4

\*\*

DAS  
28  
9-89

DAS  
DEC 2 2014  
9-89

**\*D3090-3\***  
Shim 0.125

Location

Loc Qty

Loc Code

ST025

24

18040

24

D3108-1

Manufactured No

140

Each

5.0000

2 2

\*\*

DAS  
28  
9-89

DAS  
28  
9-89

**\*D3108-1\***  
Decal

DAS  
46  
9-89

Location

Loc Qty

Loc Code

ST025

5

72047

5

D3108-2

Manufactured No

140

Each

5.0000

2 2

\*\*

DAS  
28  
9-89

DAS  
28  
9-89

**\*D3108-2\***  
Decal

DAS  
46  
9-89

Location

Loc Qty

Loc Code

ST025

5

83567

5

D3108-3

Manufactured No

140

Each

11.0000

4 4

\*\*

DAS  
28  
9-89

DAS  
28  
9-89

**\*D3108-3\***  
Decal

DAS  
46  
9-89

Location

Loc Qty

Loc Code

ST025

11

50374

1

96310

10

117901

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence
		<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other



# Picklist Print

Thursday, May 01, 2014 10:43:50 AM

Page 3

Work Order ID: 117758

**\*117758\***

Parent Item: D412-694-011

**\*D412-694-011\***

Parent Item Name: Spacedoor™ Installation Clear Windows

Start Date: 5/1/2014

Required Date: 10/31/2014

Start Qty: 1.00

Required Qty: 1.00

D3108-5 Manufactured No

140

Each

14.0000

4 4

**\*D3108-5\*** DAS  
Decal 46  
9-89

DAS  
28  
9-89

DAS  
06  
DEC 27 2014

Location

Loc Qty

Loc Code

ST025

14

110719

12

83569

2

D3108-7 Manufactured No

140

Each

14.0000

2 2

**\*D3108-7\*** DAS  
Decal 46  
9-89

DAS  
28  
9-89

DAS  
06  
9-89

Location

Loc Qty

Loc Code

ST025

14

36723

14

D3116-1 Manufactured No

140

f

70.0000

8.3333 9

**\*D3116-1\*** DAS  
Seal(\$Per Foot) 46  
9-89

DAS  
28  
9-89

DAS  
06  
9-89

Location

Loc Qty

Loc Code

ST414A

70

24697

70

(D3116-1-0500) cut qty (2) at 50.00" as per dwg  
\*\*\*per kit\*\*\*

D3116-3 Manufactured No

140

f

100.0000

8.3333 9

**\*D3116-3\***  
Seal(\$Per Foot)

DAS  
9  
9-89

DAS  
06  
9-89

Location

Loc Qty

Loc Code

ST414A

100

106992

100

(D3116-3-0500) cut qty (2) at 50.00" as per dwg  
\*\*\*per kit\*\*\*

DAS  
28  
9-89

Thursday, May 01, 2014 10:43:50 AM

Shop Packet Print

Page 3

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design <input type="checkbox"/>									
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Handling/Pre <input type="checkbox"/>									
Material <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Offset/Setup <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Transport <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
--	--	---	--

# Picklist Print

Thursday, May 01, 2014 10:43:50 AM

Page 4

Work Order ID: 117758

**\*117758\***

Parent Item: D412-694-011

**\*D412-694-011\***

Parent Item Name: Spacedoor™ Installation Clear Windows

Start Date: 5/1/2014

Required Date: 10/31/2014

Start Qty: 1.00

Required Qty: 1.00

D3118-3

DAS  
46  
9-89

Manufactured No

140

Each

12.0000

4 } 4

\*\*

**\*D3118-3\***

Sign Assembly

DAS  
28  
9-89

DEC 24 2014

DAS  
66  
9-89

Location

Loc Qty

Loc Code

ST026

12

100588

12

123455

D3118-5

DAS  
46  
9-89

Manufactured No

140

Each

5.0000

4 } 4

\*\*

**\*D3118-5\***

Decal

DAS  
28  
9-89

DAS  
66  
9-89

Location

Loc Qty

Loc Code

ST026

5

64831

1

78760

4

123038

D3128-1

DAS  
46  
9-89

Manufactured No

140

Each

4.0000

4 } 4

\*\*

**\*D3128-1\***

Shim

DAS  
28  
9-89

DAS  
66  
9-89

Location

Loc Qty

Loc Code

ST027

4

18643

1

79008

3

122946

D3144-15

DAS  
46  
9-89

Manufactured No

140

Each

4.0000

2 } 2

\*\*

**\*D3144-15\***

Doubler

DAS  
28  
9-89

DAS  
66  
9-89

Location

Loc Qty

Loc Code

CA

4

67696

4

2

Thursday, May 01, 2014 10:43:50 AM

Shop Packet Print

Page 4

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
--	--	---	--

# Picklist Print

Thursday, May 01, 2014 10:43:50 AM

Page 5

Work Order ID: 117758

\*117758\*

Parent Item: D412-694-011

\*D412-694-011\*

Parent Item Name: Spacedoor™ Installation Clear Windows

Start Date: 5/1/2014

Required Date: 10/31/2014

Start Qty: 1.00

Required Qty: 1.00

DAS

D3300-1 Manufactured No

140 Each

6.0000

2 2

\*\*

DAS

DEC 24 2014

\*D3300-1\*

DAS

46

Window

9-89

Location

Loc Qty

Loc Code

ST209

6

56108

6

122852

D412-694-01 Manufactured No

140 Each

0.0000

1 1

\*\*

DAS

DAS

\*D412-694-01\*

DAS

46

Door Assembly, LH

9-89

D412-694-015

Manufactured No

140 Each

0.0000

4 4

\*\*

128278

DAS

\*D412-694-015\*

DAS

46

Replacement Clear Window

9-89

D412-694-02

Manufactured No

140 Each

0.0000

1 1

\*\*

DAS

28

9-89

DAS

\*D412-694-02\*

DAS

46

Door Assembly, RH

9-89

D412-694-03

Manufactured No

Each

0.0000

1

\*\*

DAS

28

9-89

DAS

\*D412-694-03\*

DAS

46

Hinge Door Assembly, LH

9-89

D412-694-04

Manufactured No

140 Each

0.0000

1 1

\*\*

DAS

28

9-89

DAS

\*D412-694-04\*

DAS

46

Hinge Door Assembly, RH

9-89

DSI 9363-011

Manufactured No

140 Each

1.0000

1 1

\*\*

DAS

28

9-89

DAS

\*DSI 9363-011\*

DAS

46

Shim

Location

Loc Qty

Loc Code

FG123

1

87462

1

126067

Thursday, May 01, 2014 10:43:50 AM

Shop Packet Print

Page 5

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence
		<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

**DART**

DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. DSI 9309	REV. A SHEET 1 OF 2
DATE 05.09.26		TITLE SEAL KIT	SCALE NTS
A	05.09.26	NEW ISSUE	

## **DART SERVICE INSTRUCTION**

TO AMEND IIN-D412-694 REV. B

REF. CANADIAN STC: SH05-10

REF. FAA STC: SR02086NY

TO CLOSE THE GAP BETWEEN AIRCRAFT AND D412-694-01/-02 DOOR ASSEMBLY IT IS ACCEPTABLE TO INSTALL D3116-9-0520 SEAL AS SHOWN BELOW IN LIEU OF INSTALLING THE D3116-3-0520 SEAL PER IIN-D412-694.

ADD THE FOLLOWING PARTS TO THE LIST OF IIN-D412-694. CUSTOMERS WITH EARLY MODEL D412-694-011 KITS CAN PROCURE THE DSI 9309-011 KIT FROM DART TO DO THIS MODIFICATION.

-011	Part Number	Description
X	D412-694-011	SPACEDOOR MODIFICATION
X	DSI 9309-011	SEAL KIT
2	D3116-9-0520	SEAL
2	D3144-15	DOUBLER
48	BSP45	RIVET

### **PROCEDURE:**

- 1) LOCATE D3116-9-0520 SEAL ON D412-694-01/-02 DOOR ASSEMBLY SO THAT IT WILL REST AGAINST EXISTING AIRCRAFT SEAL WHEN DOOR IS CLOSED. ENSURE PROPER ORIENTATION OF SEAL.
- 2) TRIM D3144-15 DOUBLER AND D3116-9-0520 SEAL AS NECCESARY TO CLEAR BRACKETS ON AFT EDGE OF DOOR. ENSURE MINIMUM EDGE DISTANCE OF 0.40" (10 mm) FROM THE RIVET HOLES.
- 3) TRANSFER DRILL Ø0.129" (#30) FROM DOUBLER, THROUGH SEAL AND INTO THE DOOR. DEBURR AND INSTALL DOUBLER & SEAL USING BSP45 RIVETS. SEAL RIVETS WITH RTV-732 SEALANT.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

### **APPROVED**

BY: *[Signature]*  
D. SHEPHERD (DE # 02)

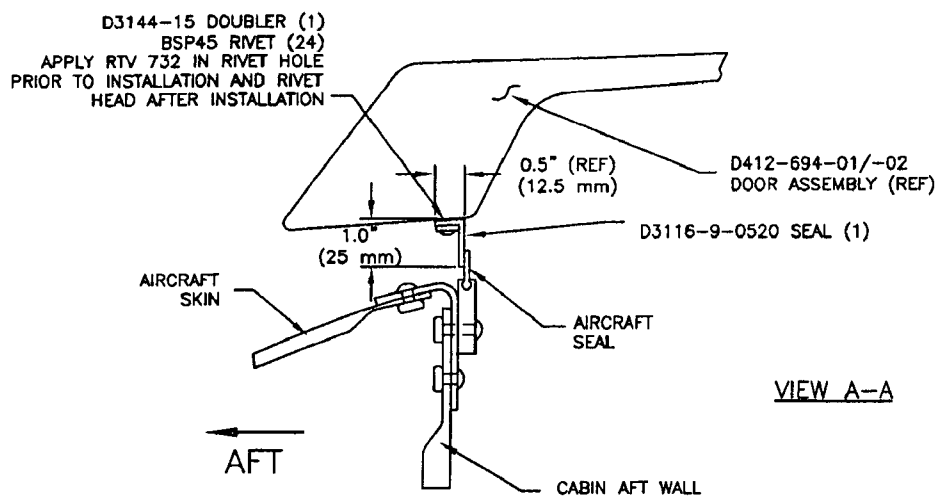
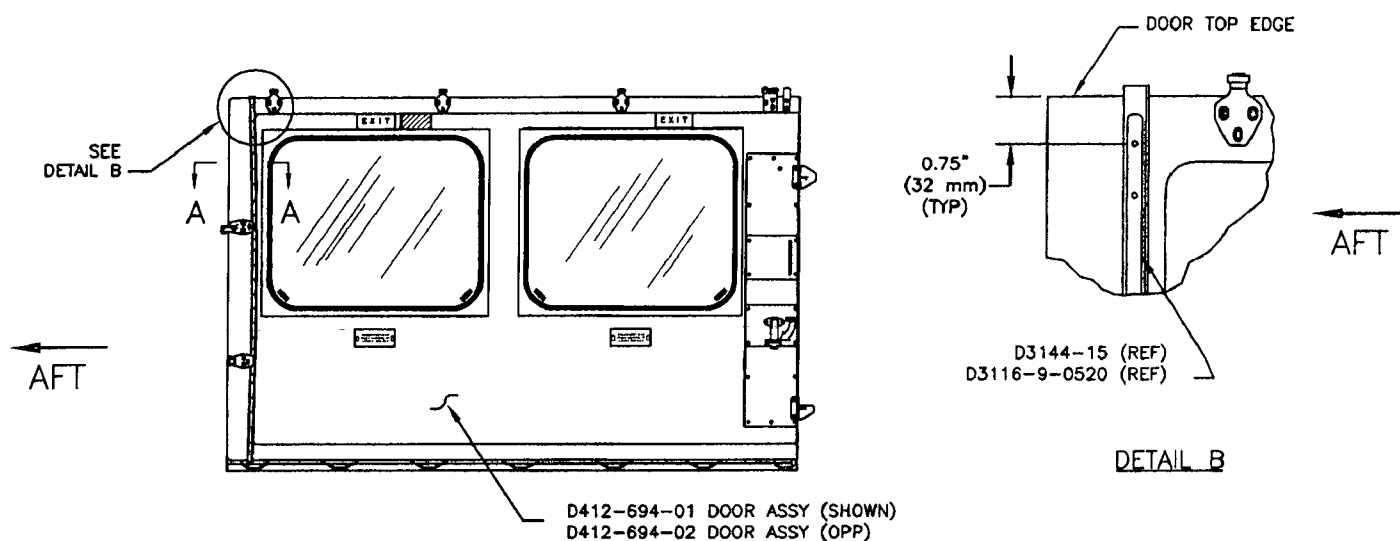
DATE: 05.09.26  
CERT. NO.: SH05-10  
ISSUE NO.: 1

Copyright © 2005 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. DSI 9309	REV. A SHEET 2 OF 2
DATE 05.09.26	TITLE SEAL KIT		SCALE NTS



CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED <i>[Signature]</i>	
BY:	D. SHEPHERD (DE # 02)
DATE:	05.09.26
CERT. NO.:	SH05-10
ISSUE NO.:	1

Copyright © 2005 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



Ref.

14/12/24

DAS  
46  
9-03

## 6. PARTS LIST

Qty -011	Qty -013	Qty -015	Qty -017	Qty -01	Qty -02	Qty -03	Qty -04	Part Number	Description
X								D412-694-011	SPACEDOOR™ INSTALLATION
	X							D412-694-013	PANEL INSTALLATION (OPTIONAL)
4		X						D412-694-015	REPLACEMENT WINDOW KIT
			X					D412-694-017	BEARING OVERHAUL KIT
1				X				D412-694-01	DOOR ASSEMBLY
1					X			D412-694-02	DOOR ASSEMBLY
1						X		D412-694-03	DOOR ASSEMBLY
1							X	D412-694-04	DOOR ASSEMBLY
2								D2126-0730	SEAL
4								D3090-1	SHIM
4								D3090-3	SHIM
2								D3108-1	DECAL
2								D3108-2	DECAL
4								D3108-3	DECAL
4								D3108-5	DECAL
2								D3108-7	DECAL
						1	1	D3110-1	ESCUTCHEON
						1	1	D3110-3	HANDLE
				1	1			D3110-5	HANDLE ASSEMBLY
						1	1	D3111-041	PLATE ASSEMBLY
						2	2	D3112-1	GUIDE
						1	1	D3113-1	SPRING
						1	1	D3114-1	PIVOT
				1	1			D3115-1	BRACKET
2								D3116-1-0500	SEAL
						1	1	D3116-11-0180	SEAL
2								D3116-3-0500	SEAL
						1	1	D3116-5-0680	SEAL
				1	1			D3116-7-0680	SEAL
				1	1			D3116-9-0770	SEAL
		1						D3117-1-0980	SEAL RETAINER
		1						D3117-3-0980	SEAL FILLER
4								D3118-3	SIGN ASSEMBLY
4								D3118-5	SIGN ASSEMBLY
						1		D3119-041	COVER ASSEMBLY
							1	D3119-042	COVER ASSEMBLY
						1		D3120-1	COVER
							1	D3120-2	COVER
						1		D3120-3	COVER
							1	D3120-4	COVER
				3	3			D3121-041	BRACKET ASSEMBLY ("ROLLER")
				1				D3121-043	BRACKET ASSEMBLY ("ROLLER")
					1			D3121-044	BRACKET ASSEMBLY ("ROLLER")
			7					D3121-21	SCREW

• COPYRIGHT © 2002 BY DART AEROSPACE LTD. •

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Revision: B

Date: 04.10.07

Qty -011	Qty -013	Qty -015	Qty -017	Qty -01	Qty -02	Qty -03	Qty -04	Part Number	Description
			5					D3121-241	BEARING ASSEMBLY
				1	1			D3122-1	LEVER
				2	2			D3123-1	CAM
				1	1			D3124-1	HOOK
				1	1			D3124-2	HOOK
						1	1	D3125-1	LEVER
						1	1	D3125-3	LEVER
						1	1	D3125-5	LEVER
						1	1	D3125-7	LEVER
				1	1			D3126-1	BRACKET ("SLIDER")
				1	1			D3126-3	BRACKET ("SLIDER")
				5	5			D3126-5	BRACKET ("SLIDER")
				1	1			D3127-1	SPACER
						1	1	D3128-1	SHIM
						2	2	D3129-1	LEVER
						2	2	D3130-1	CLEVIS BASE
						1	1	D3131-1	STOP
				1				D3132-041	ROD WELDMENT
					1			D3132-042	ROD WELDMENT
					1			D3133-041	ROD WELDMENT
				1				D3133-042	ROD WELDMENT
						1	1	D3134-1	ROD
						1	1	D3134-3	ROD
				1	1			D3135-041	HANDLE WELDMENT
		1						D3136-041	WINDOW ASSEMBLY
				2				D3137-041	BRACKET ASSEMBLY ("ROLLER")
			1					D3137-3	GUIDE
			1					D3137-5	WASHER
				1				D3138-1	COVER
					1			D3138-2	COVER
				1	1			D3139-1	GUARD
				1				D3139-3	GUARD
					1			D3139-4	GUARD
				1				D3140-05	DOOR
					1			D3140-06	DOOR
						1		D3140-07	DOOR
							1	D3140-08	DOOR
				2	2			D3141-1	SPRING
						1	1	D3143-1	CLEVIS
						3	3	D3143-3	CLEVIS
						1		D3144-1	DOUBLER
						1		D3144-105	DOUBLER
						1		D3144-107	DOUBLER
				1				D3144-109	DOUBLER
				1	1			D3144-111	DOUBLER
					1			D3144-115	DOUBLER
							1	D3144-117	DOUBLER
							1	D3144-119	DOUBLER

• COPYRIGHT © 2002 BY DART AEROSPACE LTD •

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Revision: B

Date: 04.10.07

Qty -011	Qty -013	Qty -015	Qty -017	Qty -01	Qty -02	Qty -03	Qty -04	Part Number	Description
					1		1	D3144-121	DOUBLER
					1			D3144-123	DOUBLER
				1	1			D3144-13	DOUBLER
				1				D3144-3	DOUBLER
						1		D3145-1	HINGE BRACKET
							1	D3145-2	HINGE BRACKET
						1		D3146-1	HINGE BRACKET
							1	D3146-2	HINGE BRACKET
						2	2	D3147-1	PIN
				2	2			D3148-1	CLEVIS
						2	2	D3149-1	STRIKER PLATE
						2	2	D3150-1	GUIDE
				1	1			D3151-041	DOUBLER ASSEMBLY
				1				D3152-041	BRACKET ASSEMBLY
					1			D3152-042	BRACKET ASSEMBLY
	1							D3153-11	PANEL
	1							D3153-12	PANEL
	1							D3153-13	PANEL
	1							D3153-14	PANEL
	1							D3153-15	PANEL
	1							D3153-16	PANEL
						1	1	D3154-1	KEY
				1	1			D3155-041	BRACKET ASSEMBLY
				1	1			D3155-042	BRACKET ASSEMBLY
				2	2			D3156-1	BRACKET
						2	2	D3157-1	SPACER
						3	3	D3159-041	BRACKET ASSEMBLY
						1		D3159-043	BRACKET ASSEMBLY
							1	D3159-044	BRACKET ASSEMBLY
				12	12			D3162-041	BRACKET ASSEMBLY
				1				D3163-041	COVER ASSEMBLY
					1			D3163-042	COVER ASSEMBLY
				1				D3183-041	BRACKET ASSEMBLY ("ROLLER")
					1			D3183-042	BRACKET ASSEMBLY ("ROLLER")
			2					D3183-045	BEARING ASSEMBLY
				1	1			D3203-1	HANDLE ASSEMBLY
2	1							D3300-1	WINDOW
				2	2			D3308-1	DOUBLER
				55	55	21	21	80-005-2-8	INSERT (OR SL2052-3-4)
	60							A6K75	RIVNUT
				10	10			AN525-10R6	SCREW
				8	8	4	4	AN525-10R7	SCREW
						8	8	AN960JD10	WASHER
				18	18	4	4	AN960JD10L	WASHER
				13	13	32	32	AN960JD10LL	WASHER
				6	6			AN960JD416L	WASHER
						4	4	AN960JD6L	WASHER
				6	6			AN960JD8	WASHER
						2	2	AN960JD8L	WASHER

• COPYRIGHT © 2002 BY DART AEROSPACE LTD •

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Revision: B

Date: 04.10.07



DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. DSI 9309	REV. A SHEET 1 OF 2
DATE 05.09.26		TITLE SEAL KIT	SCALE NTS
A	05.09.26	NEW ISSUE	

## **DART SERVICE INSTRUCTION**

TO AMEND IIN-D412-694 REV. B

REF. CANADIAN STC: SH05-10

REF. FAA STC: SR02086NY

TO CLOSE THE GAP BETWEEN AIRCRAFT AND D412-694-01/-02 DOOR ASSEMBLY IT IS ACCEPTABLE TO INSTALL D3116-9-0520 SEAL AS SHOWN BELOW IN LIEU OF INSTALLING THE D3116-3-0520 SEAL PER IIN-D412-694.

ADD THE FOLLOWING PARTS TO THE LIST OF IIN-D412-694. CUSTOMERS WITH EARLY MODEL D412-694-011 KITS CAN PROCURE THE DSI 9309-011 KIT FROM DART TO DO THIS MODIFICATION.

-011	Part Number	Description
X	D412-694-011	SPACEDOOR MODIFICATION
X	DSI 9309-011	SEAL KIT
2	D3116-9-0520	SEAL
2	D3144-15	DOUBLER
48	BSP45	RIVET

### **PROCEDURE:**

- 1) LOCATE D3116-9-0520 SEAL ON D412-694-01/-02 DOOR ASSEMBLY SO THAT IT WILL REST AGAINST EXISTING AIRCRAFT SEAL WHEN DOOR IS CLOSED. ENSURE PROPER ORIENTATION OF SEAL.
- 2) TRIM D3144-15 DOUBLER AND D3116-9-0520 SEAL AS NECCESARY TO CLEAR BRACKETS ON AFT EDGE OF DOOR. ENSURE MINIMUM EDGE DISTANCE OF 0.40" (10 mm) FROM THE RIVET HOLES.
- 3) TRANSFER DRILL Ø0.129" (#30) FROM DOUBLER, THROUGH SEAL AND INTO THE DOOR. DEBURR AND INSTALL DOUBLER & SEAL USING BSP45 RIVETS. SEAL RIVETS WITH RTV-732 SEALANT.

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
<b>APPROVED</b>	
BY:	<i>[Signature]</i> D. SHEPHERD (DE # 02)
DATE:	05.09.26
CERT. NO.:	SH05-10
ISSUE NO.:	1

Copyright © 2005 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.